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Public Information Statement  
National Weather Service Seattle Wa  
1130 AM PST THU DEC 22 2016

...2016 Western Washington Weather Year in Review...

2016 was a year that began with one of the three warmest El Ninos since 1950 and finished with a weak La Nina that produced a big change in temperatures. The warm El Nino event produced well above average temperatures early in the year. February was between 4 and 5 degrees warmer than average in Western Washington. Temperatures remained near or above average until December when cooler air prevailed and temperatures were by far the coolest of the year averaging about 3 to 4 degrees below average.

There were six weather-related fatalities and five injuries – most occurring in the mountains. Avalanches claimed two lives in January, one near Snoqualmie Pass and the other near Mt Baker. The other mountain weather-related fatalities involved a Mt Rainier climber succumbing to cold weather exposure in March and a skier falling into a tree well near Snoqualmie Pass on December 11<sup>th</sup>.

The other weather-related fatalities included a motorist killed in his vehicle by a falling tree during the March 13th wind storm, and a teenage swimmer who drowned in chilly Green River waters during the first warm weather period of the year in April.

Weather-related damages were estimated to be close to five million dollars. Four weak tornadoes occurred in the state, all east of the Cascades. There were also three waterspouts that occurred off the southwest coast. The state averages between one and two tornadoes per year.

April and November were also quite warm. April was between 5 and 6 degrees above average for the month while November was about 4.5 to 7 degrees above the monthly average. Uniquely for SeaTac Airport, all thirty days of November had mean daily average temperatures above average with the month finishing 5.5 degrees above average. Bellingham was an amazing 7.1 degrees above average for November. In sharp contrast, Bellingham was 5.3 degrees below average in December through the 21<sup>st</sup>.

2016 was a wet year across Western Washington though not close to any annual records. Seattle had its 13th wettest month ever in October with 10.05 inches. That soggy month helped push the annual total to 43.76 inches as of December 21<sup>st</sup>, 7.93 inches above average. This precipitation total was amazing close to the amount last year of 43.68 inches. Olympia has had 55.77 inches of rain thus far this year, just over 8 inches above average. Last year had 55.52 inches at this point last year, again quite close to this year.

In contrast, Quillayute Airport near Forks has received whopping 117.98 inches of rain through December 21<sup>st</sup>, 22.50 inches above average.

Below is a list of the year's significant weather events and the record temperatures and precipitation established thus far this year.

## Significant Events

### Tornadoes and Waterspouts

March 27 – Snohomish County – A funnel cloud was reported 2 miles southwest of Snohomish and lasted only about a minute.

March 28 – Spokane County – A brief funnel cloud was reported near Cheney.

May 21 – Benton County – A short-lived EF0 tornado touched down 2 miles southeast of Kennewick knocking down a few trees. Twenty thousand dollars in damage was reported.

June 18 – Snohomish County - A funnel cloud was reported near Marysville and lasted less than two minutes.

June 18 – Pacific County – Two brief waterspouts were reported by the US Coast Guard and local media just offshore from Cape Disappointment and Long Beach.

July 10 – Cowlitz County – A brief funnel cloud was reported near Kalama.

July 22 – Douglas County – A brief EF0 tornado touched down 5 miles northwest of Mold. No damage was reported.

July 22 – Spokane County – A short-lived EF0 tornado touched down 2 miles northeast of Airway Heights. No damage was reported.

August 9 – Spokane County – A brief EF0 tornado touched down about 2 miles northeast of Airway Heights. No damage was reported.

October 10 – Spokane County – A brief funnel cloud was reports about 3 miles east of Spokane.

October 14 – Pacific County – A brief waterspout was reported in the Columbia River by a Columbia Bar Pilot.

### Lightning/Thunderstorms

No significant thunderstorms with lightning occurred.

### Hail

No severe sized hail – 1 inch or greater diameter – was reported during the year though there were a number of small hail reports.

### High Winds

February 5 – Western Whatcom County and the San Juans – Strong winds up to 65 mph occurred with little impact.

March 1 – Coast and Central Puget Sound Area – Strong winds up to 65 mph along the coast and 50 mph in the Puget Sound area resulted in about 50,000 customers without power. A tree fell North Kitsap Peninsula home, injuring a woman occupant and significantly damaging the home. Total estimated storm damage was close to 600,000 dollars.

March 9 and 10 – Coast and Interior North of Central Puget Sound – Strong winds of up to 66 mph knocked power out to about 50000 customers, closed the Hood Canal Bridge for 2 hours, suspended north sound ferry service, and combined with rough seas broke a 75- year old fishing vessel free from its moorage and into rocks destroying the vessel. Total storm damage was estimated to be around 1.7 million dollars.

March 13 – Coast and Central Puget Sound Area Northward – Strong winds of up to 69 mph knocked down many trees, knocked power out to a quarter million people, closed the Hood Canal and Evergreen Point Floating Bridges for several hours, suspended ferry service, and closed I-405 in Snohomish County due to downed trees on the pavement. One man died in Seattle's Seward Park when a tree crushed his vehicle. One person was injured in their home when a tree fell on it. A semi-truck toppled over on the Tacoma Narrows Bridge halting traffic for a while. The storm damage total was estimated to be around 1.8 million dollars.

October 14-15 – Much of Western Washington – Strong winds of up to 64 mph toppled some trees and tree branches knocking power out to about 90,000 people. A home in Olympia was destroyed in Olympia from a fallen tree and several vehicles in the Lakewood area were damaged by fallen trees. Total storm damage was estimated to be around one half million dollars.

### Winter Storms/Wind Chill

March 26 – Mt Rainier – A pair of climbers visiting the U.S. encountered a winter storm with snow, strong winds, blowing snow and frigid temperatures while returning to Camp Muir after reaching the summit. One climber succumbed to exposure and the other was airlifted to a local hospital. In a separate incident on the mountain, a snowshoer from Lacey was also caught in the storm and managed to make it Camp Muir suffering some frostbite.

December 5-19 – Much of Western Washington – Much colder than average temperatures enveloped the region during this period. Light snow fell at times in the lowlands with accumulations ranging from a trace up to 5 inches in most areas and up to 8 inches on the northeast side of the Olympic Peninsula.

December 11 – Snoqualmie Pass – A male skier fell into a tree well near Alpental Ski area and died.

#### Avalanche

January 1 – Snoqualmie Pass - A male hiker was killed by an avalanche near Granite Mountain.

January 24 – Mt Baker Area – A slab avalanche caught two skiers, killing one and seriously injuring the other.

February 6 – A slab avalanche caught two skiers, partially burying and injuring both.

#### Floods/Heavy Rain/Landslides

No significant widespread flooding occurred in Western Washington during the year. Flow exceeded flood stage at times on the Skokomish river in Mason County as well as the Snoqualmie, Skykomish and Stillaquamish rivers in early November.

#### Marine Incidents Including Coastal Flooding/High Surf and Rip Currents

No significant coastal flooding or high surf events occurred during the year.

#### Heat/Wildfire

April 19 – King County – During a period of unseasonably warm spring weather, a 17-year old male swimming across the Green River near Auburn had trouble and went under in the cold river water.

Here are the high, low and precipitation records that were broken during 2016. Entries have the month/date of the record, with the record value following. T – means that the record was tied.

.....NEEDS TO BE UPDATED BELOW. ....

There were far more record daily high temperatures than lows. Daily rainfall records also far outnumbered the low temperature records set.

Sea-Tac Airport – Records date back to 1945

High Temp	Low Temp	Precipitation
05/01 85	NONE	03/08 1.27
07/01 94		03/16 1.09
08/11 96		03/28 0.87
09/06 90		04/17 0.73
10/06 78(T)		05/03 1.31

10/19	72	05/08	0.54
11/27	58(T)	07/23	0.76
12/05	55(T)	08/13	0.85
12/07	58	09/23	0.72
12/09	61	10/22	1.26
12/10	66		
12/11	58		

#### Olympia Airport – Records date back to 1948

High Temp	Low Temp	Precipitation
05/01 88	03/22 24(T)	02/17 1.23
07/01 94	11/16 16	03/08 1.77
09/06 89	11/17 18(T)	05/08 0.52
10/19 73	11/18 19	07/23 0.27
11/26 59(T)	12/02 19	08/13 0.57
11/27 58		10/13 0.56
12/09 59(T)		10/22 1.43
12/10 64		
12/11 58(T)		

#### Quillayute Airport – Records date back to 1966

High Temp	Low Temp	Precipitation
01/16 60	11/15 21	01/10 2.74
01/17 64	11/17 24	03/05 1.65
01/24 66	11/29 20	03/08 2.70
01/25 60	11/30 19	04/17 1.71
01/26 61	12/01 19	05/03 1.10
03/24 67	12/02 25	05/08 0.92(T)
04/30 84		06/19 0.79
05/01 83		10/13 1.92
05/14 83		10/22 2.44
07/01 91(T)		11/03 4.20
09/05 87		12/08 2.30
09/06 89		12/10 3.36
10/03 77(T)		
12/05 57		
12/07 59		
12/09 57		
12/10 58		
12/11 55		

Hoquiam Airport – Records date back to 1953

High Temp	Low Temp	Precipitation
01/24 58	02/07 21	02/16 1.82
03/24 67(T)		03/02 1.35
04/30 84		04/17 0.77
05/01 80		04/23 1.63
05/14 84		05/03 1.21
07/01 89(T)		05/08 1.16
09/06 87		07/23 0.63
11/26 56		09/23 1.30
11/27 57(T)		10/13 1.18
12/07 56		12/20 1.88
12/08 56		
12/09 59		
12/10 60		
12/21 55(T)		

Bellingham Airport – Records date back to 1949

High Temp	Low Temp	Precipitation
04/07 68(T)	02/06 20(T)	03/02 0.62
05/01 78	02/07 20(T)	03/19 0.53
05/15 80	11/30 18(T)	04/24 1.15
07/01 84	12/01 19(T)	05/04 0.86
07/13 86		07/23 0.72
08/26 84		07/24 0.31
10/19 75		08/13 0.51
11/06 63(T)		09/02 0.53
12/08 62		12/10 0.93
12/09 63		
12/10 67		
12/11 59		
12/18 56(T)		

Seattle WFO at Sand Point – Records date back to 1986

High Temp	Low Temp	Precipitation
03/05 61(T)	02/04 27	02/10 0.48

04/29 76(T)	02/05 21	02/11 0.68
05/01 86	02/06 20	02/15 0.74
05/02 69(T)	02/07 23	02/16 1.04
05/13 77	06/21 50(T)	03/05 1.43
05/14 80(T)	11/12 28	03/08 1.13
07/01 88	11/13 30	03/16 1.13
07/06 85	11/14 29	04/17 1.04
07/12 88	11/15 29	05/03 0.95
07/13 87	11/17 28(T)	05/04 0.49
07/15 85	11/18 30(T)	05/08 0.40
07/16 89	11/30 23	07/23 0.89
08/11 95	12/01 26	08/12 0.32
08/18 85	12/02 28	08/13 0.48
08/25 86		08/30 0.26
08/26 89		09/02 0.58
09/06 87		09/23 0.65
09/15 87		09/24 0.76
09/21 83		10/22 1.39
10/04 73		10/31 1.18
10/06 78(T)		
10/13 69(T)		
10/19 73		
11/06 62		
11/25 57		
11/26 59		
11/27 59		
12/06 54(T)		
12/08 58		
12/09 61		
12/10 65		
12/11 57		
12/15 56		
12/21 55		

Grub/Felton/Schneider/Neher/Bower/Burke/McDonnal/Buehner